

### **Remarks**

Claims 20-39 are pending. Favorable reconsideration is respectfully requested.

Applicants note with appreciation the withdrawal of previously stated objections to claims 20-24 and 27-28; the withdrawal of rejections of claims 20-23, 30, 32 under 35 U.S.C. § 112, second paragraph; the withdrawal of rejections of claims 20-21, 24-25, 27, 29, 31 and 34-37 under 35 U.S.C. § 102(b) over Ritter et al., USPN 5,439,953, hereinafter *Ritter*; the withdrawal of rejections to claims 20-21, 24-27, 29-31, 33, 36-38 under 35 U.S.C. § 102(b) over Hashemzadeh et al., US 2002/0135086, hereinafter *Hashemzadeh*; the withdrawal of rejections to claim 28 under 35 U.S.C. § 103(a) over *Ritter* and Famili et al., USPN 5,362,778, hereinafter *Famili*; and the withdrawal of rejection of claim 32 under 35 U.S.C. § 102(a) over *Hashemzadeh* and Miyamoto et al., JP 2003-02061, hereinafter, *Miyamoto*.

In addition, in response to Applicants' request for republication submitted via Applicants' Amendment dated May 26, 2009, the Examiner has advised Applicants, via their counsel of record, to follow the procedures set forth in 37 CFR 1.221. *See* Interview Summary dated July 23, 2009. It seems additional fees are involved in requesting republication as so advised, Applicants therefore will request republication at a later time, for instance at the time for paying issue fees.

### **Remarks Directed to the Claim Objections**

Various claim objections are stated on pages 2 of the final Office Action. Without waiver or acquiescence to the Examiner's objections, Applicants have amended pending claims 20, 23, 26-27 and 31-36 to provide greater clarity. Support for the claim amendments can be found in the specification and in the claims as originally filed. No new matter is introduced by these claim amendments. Reconsideration and withdrawal of these objections is solicited.

***Remarks Directed to Claim Rejections***  
***Under 35 U.S.C. § 102(b) Over Wendel, USPN 5,358,998***

The Examiner has rejected claims 20, 22-23, 26-27, 29-30 and 39 under 35 U.S.C. § 102(b) over *Wendel* (the Office Action, pages 3-4).

Anticipation has been held to require strict identity. The reference must expressly or implicitly teach every claimed limitation as recited in the subject claim(s). The fact that a certain result or characteristic may occur or may be present in the prior art is not sufficient to establish the inherency of that result or characteristic. *In re Rijckaert*, 9F. 3d 1531, 1534, 28 USPQ 2d 1955, 1957 (Fed. Cir. 1993).

Independent claim 20 recites a starch molding composition comprising optionally modified starch combined with redispersible powder of at least one polymer . . . wherein the redispersible powder of the at least one polymer is provided in an amount of from 5 to 60% by weight based on the total weight of the starch.

Contrary to the Examiner's assertions stated on page 3 of the Office Action, *Wendel's* Table 7 does not teach or suggest the feature of polymer-to-starch weight ratio of 5% to 60% as required in claim 20. The 40% by weight of starch in Table 7, as suggested by the Examiner, is believed to be based on the amount of polymerized monomers and hence a weight ratio of starch-to-polymer. See for instance at lines 32-36 in col. 12 of *Wendel*. This analysis is consistent with *Wendel's* disclosure of a general starch-to-polymer weight ratio of 1 to 120%. See for instance at lines 14-18 in col. 6 of *Wendel*. Therefore, based on Table 7 as cited by the Examiner, *Wendel* teaches a polymer-to-starch weight ratio of 100/40 or 250%, a ratio completely outside the claimed range of 5 to 60%.

Since *Wendel* fails to teach or suggest with "strict identity" the subject matter of claim 20, claim 20 and claims 20-23, 26-27, 29-30, 39 dependent therefrom are submitted to be patentable. Independent claim 39 is similarly submitted to be patentable for the aforementioned reasons. Reconsideration and withdrawal of these rejections is respectfully solicited.

***Remarks Directed to Rejections***  
**Under 35 U.S.C. § 103(a)**

- I) of claims 20-21, 24-25, 27, 29, 31, 34-37 and 39  
over *Ritter* in view of *Wendel*

The Examiner has rejected claims 20-21, 24-25, 27, 29, 31, 34-37, and 39 under 35 U.S.C. 103(a) over *Ritter* in view of *Wendel*. See pages 4-5 of the Office Action.

Contrary to the Examiner's assertions stated on page 5 of the Office Action, *Ritter* can not be modified as suggested by the Examiner. *Ritter* concerns how to digest starch in one thermo-mechanical step, while making the digested starch less hydrophilic and more hydrophobic. See for instance Abstract and at lines 19-29 and 54-56 in col. 1. As to increasing hydrophobicity, *Ritter* uses synthetic polymer compounds that are largely water-insoluble to confer water resistance to the digested starch. See for instance at lines 52-66 in col. 2. As to simplifying the digestion process, *Ritter* uses a single step method which is carried out by forming a homogenous mixture of starch, water and the largely water-insoluble polymer and plastizing the starch in an extruder under the effects of water. See for instance col. 8, lines 14-23; and col. 14, line 65 to col. 15, line 19. The water necessary for effecting the starch digestion comes from the aqueous polymer dispersion. Notably, *Ritter* uses water dispersion, but not water solution, of the polymers, to accommodate the latter's characteristics of being largely water-insoluble as stated above. See for instance the Abstract. Therefore, replacing the polymer water dispersion in *Ritter* with a polymer in dry powdery form would deprive the water source necessarily required in the *Ritter*'s one step digestion process.

Moreover, Applicants submit that *Ritter* and *Wendel* are not properly combinable. It is well established that one cannot simply "pick and choose" isolated teachings from a reference while disregarding other salient features of the reference. *In re Wesslau*, 147 USPQ 391, 393 (CCPA 1965). These "other salient teachings" must be incorporated into any rejection based on a combination of references.

*Ritter* is all about processing and digesting starch; *Ritter's* digestion mixture in solids form is based on starch; and *Ritter* merely uses polymer as a process additive to confer hydrophobicity to the starch as stated herein above. See also lines 51-65 in col. 5. For instance, as shown in the Example 1, *Ritter* teaches a starch-to-polymer weight ratio of about 245% (40.0% for the potato starch relative to 16.2% for the poly(vinyl acetate)); as shown in the Example 2, *Ritter* teaches a starch-to-polymer weight ratio of about 217% (40% for the potato starch relative to 18.4% for the poly(vinyl acetate)); as shown in the Example 3, *Ritter* teaches a starch-to-polymer weight ratio of about 173% (36% for the potato starch relative to 20.8% for the poly(vinyl acetate)); and as shown in the Example 4, *Ritter* teaches a starch-to-polymer weight ratio of about 151% (40% for the potato starch relative to 26.5% for the poly(VAc/DBM/BA).

*Wendel* is drastically different from *Ritter* at least with respect to the use of starch and the starch-to-polymer ratios employed. As previously submitted by the Applicants, *Wendel* is directed to processing and modifying polymers; and *Wendel* merely uses starch as a process additive, particularly as a surfactant to stabilize the polymers in aqueous dispersion form. See for instance pages 8-9 of Applicants' Amendment dated May 26, 2009. As stated herein above, *Wendel* uses a starch-to-polymer weight ratio of 1% to 120% which is consistent with *Wendel's* stated purpose of modifying polymer stability in dispersion form and merely uses starch as a surfactant.

These relevant but contradicting features of *Ritter* and *Wendel* are tabulated in the Table "I" shown below.

Table "I" – Comparative View of the Salient Features between *Ritter* and *Wendel*

	Directed To Processing and Modification of	Process Additives	Exemplified Starch-to-Polymer Weight Ratios
<i>Ritter</i>	starch	polymer	245%, 217%, 173%, 151%, etc.
<i>Wendel</i>	polymer	starch	1% to 120%

As illustratively shown in the Table above, these teachings are diametrically opposed between the two references *Ritter* and *Wendel*, and all are salient features of the references. Such references with opposing teachings cannot be combined at least within the context of *Wesslau*. See also *In re Grasselli*, 218 USPQ 769 (Fed. Cir. 1983).

Reconsideration and withdraw of these rejections is respectfully solicited.

II) of claim 32 over *Ritter* in view of *Wendel* and *Miyamoto*

On page 6 of the final Office Action, the Examiner admits that *Ritter* and *Wendel* are silent with respect to biodegradable polyester, but cites *Miyamoto* for teaching of the biodegradable polyester as recited in claim 32. Claim 32 is submitted to be patentable due to its dependency from the independent claim 20 which is believed to be allowable for at least the reasons set forth above. The Examiner has not indicated how *Miyamoto* would cure this deficiency. Reconsideration and withdrawal of the rejection to claim 32 over *Ritter* in view of *Wendel* and *Miyamoto* is respectfully solicited.

III) of claim 28 over *Ritter* in view of *Wendel* and *Famili*

As stated on pages 6-7 of the final Office Action, claim 28 is rejected under 35 U.S.C. § 103(a) over *Ritter* in view of *Wendel* and *Famili*. In rejecting claim 28, the Examiner opines that *Ritter* and *Wendel* are silent with respect to the properties of polyvinyl alcohol, but cites support to *Famili* for teaching of polyvinyl alcohol. Claim 28 is submitted to be patentable due to its dependency from independent claim 20 which is believed to be patentable for at least the reasons set forth above in relation to *Ritter* and *Wendel*. The Examiner has not provided for the record how *Famili* would cure this deficiency. In fact, *Famili* is merely cited for its alleged teaching in relation to polyvinyl alcohol. Moreover, claim 28 is patentable for additional reasons as Applicants previously have submitted. See pages 9-10 of Applicants' Amendment dated May 26, 2009. Reconsideration and withdrawal of this rejection is solicited.

IV of claims 33 and 38 over *Ritter* in  
view of *Wendel* and *Hashemzadeh*

As stated on pages 7-8 of the final Office Action, the Examiner has rejected claims 33 and 38 under 35 U.S.C. § 103(a) over *Ritter* in view of *Wendel* and *Hashemzadeh*. Claims 33 and 38 are submitted to be patentable due to their dependency from independent claim 20 for at least the reasons set forth above in relation to *Ritter* and *Wendel*. The Examiner has not provided for the record how *Hashemzadeh* would cure this deficiency. In fact, the Examiner has merely cited *Hashemzadeh* for its alleged teaching in relation to cellulose in the form of wood particles, wood fibers, woodmeal or mixtures thereof. Reconsideration and withdrawal of this rejection is solicited.

CONCLUSION

Applicants submit that the claims are now in condition for allowance, and respectfully request a Notice to that effect. If the Examiner believes that further discussion will advance the prosecution of the application, the Examiner is highly encouraged to telephone Applicants' attorney at the number given below.

Please charge any fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

Respectfully submitted,

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